# MATERIAL SAFETY DATA SHEET ZINC OXIDE

## Section 1 - Chemical Product and Company Identification

MSDS Name: Zinc oxide

Synonyms:

Company Identification: Rawpharma Biz Pvt Ltd 1101-CITY CENTRE-2, BESIDE SUKAN MALL, SCIENCE CITY ROAD, SOLA Ahmedabad, Gujarat, 380060

Telephone

Number:

Emergency
Telephone Number:

Website: www.rawpharmabiz.com

9879522397

8320310672 (10:00am - 05:00 pm) [Office hours]

#### **Section 2 - Composition, Information on Ingredients**

**CAS#**, **Chemical Name:** %, **EINECS#** 1314-13-2, Zinc oxide, 99.5+%, 215-222-5

#### **Section 3 - Hazards Identification**

#### **EMERGENCY OVERVIEW**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects

Eye: May cause eye irritation.

**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.

**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:** 

#### **Section 4 - First Aid Measures**

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Get medical aid. Wash mouth out with water.

**Inhalation:** Remove from exposure and move to fresh air immediately. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## **Section 5 - Fire Fighting Measures**

General Information: Substance is noncombustible.

Extinguishing Media: Substance is noncombustible; use a gent most appropriate to extinguish surrounding

fire.

#### **Section 6 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Do not let this chemical enter the environment.

#### **Section 7 - Handling and Storage**

**Handling:** Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

## Section 8 - Exposure Controls, Personal Protection

#### **Engineering Controls:**

Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits, CAS#** 

1314-13-2:

United States OSHA: 5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Belgium - TWA: 10 mg/m3 VLE (dust); 5 mg/m3 VLE (fumes) Belgium - STEL: 10 mg/m3 VLE (fumes),

France - VME: 5 mg/m3 VME (fume); 10 mg/m3 VME (dust),

Germany: 5 mg/m3 TWA (respirable fraction, smoke),

Japan: 1 mg/m3 OEL (respirable dust); 4 mg/m3 OEL (total dust),

Malaysia: 5 mg/m3 TWA (fume); 10 mg/m3 TWA (dust),

Netherlands: 5 mg/m3 MAC (smoke),

Russia: 0.5 mg/m3 TWA (aerosol),

Spain: 5 mg/m3 VLA-ED (vapor); 10 mg/m3 VLA-ED (dust) Spain: 10 mg/m3 VLA-EC (fume),

## **Personal Protective Equipment**

Eyes:, Wear chemical splash goggles.

**Skin:**, Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**, Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**, Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirators if exposure limits are exceeded or if irritation or other symptoms are experienced.

## **Section 9 - Physical and Chemical Properties**

Physical State:, Powder

Color:, white - yellowish-white Odor:,

odorless

**pH:**, 7 (50 g/l aq.sol.(susp)) **Vapor Pressure:**, Not available

Viscosity:, Not available Boiling Point:, Not available

Freezing/Melting Point:, 1975 deg C (3,587.00°F)

Autoignition Temperature:, Not available

Flash Point:, Not available

Explosion Limits: Lower:, Not available
Explosion Limits: Upper:, Not available
Decomposition Temperature:, Not available

Solubility in water:, 1.6 mg/l (29°C) Specific Gravity/Density:, 5.600 Molecular Formula:, ZnO Molecular Weight:, 81.38

#### Section 10 - Stability and Reactivity

Chemical Stability:, Stable under normal temperatures and pressures.

Conditions to Avoid:, Incompatible materials, dust generation.

Incompatibilities with Other Materials, Strong oxidizing agents, acids, bases, magnesium, chlorinated rubber, zinc chloride, hydrogen fluoride.

Hazardous Decomposition Products, not available Hazardous Polymerization, Will not occur.

#### **Section 11 - Toxicological Information**

RTECS#:, CAS# 1314-13-2: ZH4810000 ZH4817000 LD50/LC50:,

RTECS:

CAS# 1314-13-2: Draize test, rabbit, eye: 500 mg/24H Mild;

Draize test, rabbit, skin: 500 mg/24H Mild; Inhalation, mouse: LC50 = 2500 mg/m3; Oral, mouse: LD50 = 7950 mg/kg; Other:

**Carcinogenicity:** Zinc oxide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. **Other:**, See actualentry in RTECS for complete information. Mutagenicity: Ames-test: negative.

#### **Section 12 - Ecological Information**

Ecotoxicity:, Daphnia: Daphnia: EC50 > 1000 mg/L; 48H; .

Fish: Bluegill/Sunfish: LC50>320 mg/L; 96H;. Fish: Fathead Minnow: LC50: 2246 mg/L; 96H;. Fish: Rainbow trout: LC50: 1.1 mg/L; 96H;.

Other: Do not empty into drains.

## **Section 13 - Disposal Considerations**

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information			
,	IATA,	IMO,	RID/ADR
Shipping Name:,	environmentally	environmentally	environmentally
	hazardous substance	hazardous substance	Hazardous Substance
	SOLID, N.O.S.*	SOLID, N.O.S	SOLID, N.O.S.*
Hazard Class: ,	9,	9,	9
UN Number: ,	3077,	3077,	3077
Packing Group: ,	III,	III,	III
Section 15 - Regulatory Information			

#### **European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: N Risk Phrases:

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 60 This material and its container must be disposed of as hazardous waste.

WGK (Water Danger/Protection)

CAS# 1314-13-2:0

Canada

CAS# 1314-13-2 is listed on Canada's DSL List

**US Federal** 

**TSCA** 

CAS# 1314-13-2 is listed on the TSCA Inventory.

## **Section 16 - Additional Information**

RAWPHARMA BIZ provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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